WHAT IS CLAIMED IS:

1. A projection system, comprising:

a light source;

a color scanner including a scrolling unit and a driving source for rotating the scrolling unit so that a plurality of color bars are scrolled, wherein the scrolling unit includes at least one lens cell and converts a rotation of the at least one lens cell into a rectilinear motion of a lens array of the scrolling unit through which light passes;

a light valve, which electrically scans the plurality of color bars according to an input image signal; and

a control circuit, which renders optical scanning of at least one of a plurality of color bars in phase with electrical scanning of the light valve by an image signal, wherein the color bars are formed on the light valve due to a rotation of the scrolling unit.

2. The projection system of claim 1, further comprising a color separator which separates light from said light source according to color.

3. The projection system of claim 1, wherein the control circuit comprises a driving source controller which controls the driving source so that the optical scanning of the at least one color bar is in phase with the electrical scanning by changing a rotation of the driving source according to a phase offset value which represents a phase difference between the optical scanning and the electrical scanning.

4. The projection system of claim 3, wherein:

the control circuit further comprises a reference phase generator which generates a reference phase signal and provides the reference phase signal to the light valve; and

the electrical scanning of the light valve is performed based on the reference phase signal, and the phase offset value is determined based on the reference phase signal.

5. The projection system of claim 4, wherein the phase offset value is determined by the steps of:

providing an electrical scanning including image information for all colors to the light valve based on the reference phase signal;

scanning the plurality of color bars on the light valve based on the reference phase signal; and

adjusting phases of scanning of the color bars on the light valve until a bar of a specific color bar is modulated by only image information corresponding to the specific color.

6. The projection system of claim 5, wherein the phase offset value is stored in a non-volatile memory accessible by the controller.

7. The projection system of claim 4, wherein the phase offset value is stored in the non-volatile memory accessible by the controller.

8. The projection system of claim 3, wherein the phase offset value is stored in a non-volatile memory accessible by the controller.

9. The projection system of claim 1, wherein:

the scrolling unit has a plurality of lens cells spirally formed thereon.

10. The projection system of claim 9, wherein the at least one lens cell of the scrolling unit is a cylindrical lens.

11. The projection system of claim 9, wherein the scrolling unit is a disk.

12. The projection system of claim 9, wherein the number of spiral lens cells is at least four.

13. The projection system of claim 1, wherein the plurality of color bars are scrolled by a rotation of the scrolling unit by the driving source such that when the scrolling unit rotates, a lens array of lens cells through which light passes appears to move rectilinearly in a direction toward or away from a rotation center of the scrolling unit.

14. The projection system of claim 1, further comprising first and second fly-eye lenses which are installed between the scrolling unit and the light valve and which each comprising a plurality of lens cells which correspond one-to-one with the lens cells of the scrolling unit..

15. The projection system of claim 14, further comprising a relay lens which is installed between the second fly-eye lens and the light valve and which transmits light beams passed through the second fly-eye lens so that light beams of different colors are focused on different locations of the light valve.

16. The projection system of claim 14, further comprising a plurality of cylindrical lenses, disposed respectively in front of and behind the scrolling unit so as to adjust the width of a light beam incident upon the scrolling unit.

17. The projection system of claim 1, further comprising a plurality of cylindrical lenses, disposed respectively in front of and behind the scrolling unit so as to adjust the width of a light beam incident upon the scrolling unit.

18. The projection system of claim 1, further comprising a color separator which separates a light beam emitted from the light source into a plurality of color beams by selectively reflecting the light beam according to wavelength.